

CLAIMS

We claim:

1. A fuseless security system power supply circuit with overload protection comprising:
 - a. a current sensor for sensing the levels of current entering a circuit;
 - b. a controller that monitors current levels sensed by said current sensor;
 - c. a switch responsive to said controller wherein said controller opens said switch to thereby turn off current entering the circuit when a specific current level is sensed; and
 - d. wherein said controller continues to periodically senses current levels at said current sensor and closes said switch when current levels have fallen below the preset level and thereby allow current to flow into the circuit again.
2. The circuit of claim 1 wherein voltage produced by the circuit is regulated.
3. The circuit of claim 2 further comprising a voltage monitor for monitoring voltage produced by the circuit and said controller regulates voltage levels produced by said circuit based on readings from said voltage monitor to which said controller is actively connected.
4. The circuit of claim 3 further comprising a filter to filter the voltage generated by the circuit.
5. The circuit of claim 1 wherein said switch further comprises a circuit that includes a semiconductor device actively connected to said controller to perform the switching function in response to a signal from said controller.

6. The circuit of claim 1 further comprising a power inductor and an overload indicator actively attached to the circuit to respectively signal the circuit is operating within normal parameters or is in an overload condition.

7. The circuit of claim 1 wherein said controller after shutting off said switch as the result of sensing preset current levels periodically turns on said switch for a momentary period of time to determine if preset or greater amounts of current will still be continued to be drawn.

8. A method for preventing overload in a security system circuit comprising the steps of:

- a) monitoring current levels of current entering a security system circuit;
- b) shutting the circuit down when the current levels reach a preset level;
- c) continuing to sample the current being supplied for the circuit;
- d) determining when the current levels of the current being supplied to the circuit have fallen below the preset levels;
- e) resetting the circuit to accept current for operation after determining the current levels have fallen below the preset levels; and
- f) continuing to monitor the current levels after resetting of the circuit.

9. The method of claim 8 wherein the step of monitoring the current levels to determine if they have returned to acceptable levels includes: momentarily allowing the circuit to draw current to determine the levels at which the circuit is drawing current and determine if they have fallen below the preset levels.

10. The method of claim 8 comprising the additional steps of providing a regulated power supply.

with the first two, at least in the case of the first two.

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